

XI. CONSERVATION RECOMMENDATIONS

Section 7(a)(1) of the Act directs Federal agencies to utilize their authorities to further the purposes of the Act by carrying out conservation programs for the benefit of endangered and threatened species. Conservation recommendations are discretionary agency activities to minimize or avoid adverse effects of a proposed action on listed species or critical habitat, to help implement recovery plans, or develop information.

The following conservation recommendations are provided pursuant to section 7(a)(1) of the ESA for developing management policies and regulations, and to encourage multilateral research efforts which would help in reducing adverse impacts to listed species in the Pacific Ocean.

1. NMFS should research modifications to existing gear that (1) reduce the likelihood of gear interactions and (2) dramatically reduce the immediate and/or delayed mortality rates of captured turtles (e.g., visual or acoustic cues, dyed bait, hook type). All research funded and/or implemented by NMFS must be covered by a research and enhancement permit pursuant to section 10(a)(1)(a) of the ESA. The goal of any research should be to develop a technology or method, via a robust experimental assessment, which would achieve the above two goals and remain economically and technically feasible for fishermen to implement.
2. NMFS should research development or modifications of existing technologies, such as sonar, to detect and alert fishers if sea turtles or marine mammals become entangled in their gear.
3. NMFS should explore the feasibility of developing a system for fishermen to collect life history information on sea turtles.
4. NMFS should continue efforts to gather international support for the Inter-American Convention for the Protection and Conservation of Sea Turtles.
5. NMFS should support the development of a trans-Pacific international agreement that would include Pacific island and Pacific rim nations for the protection and conservation of sea turtle populations.
6. NMFS should undertake efforts to implement protection measures and management actions to protect nesting leatherbacks and increase hatchling production at key nesting beaches in the Pacific.
7. NMFS should establish an observer program for the California-based longline fishery to determine the impact of the fishery may be having on sea turtle and other protected species populations.
8. NMFS should provide technical and financial assistance necessary to export advances in knowledge of techniques and gear modifications that reduce interactions with sea turtles and/or dramatically reduce the immediate and/or delayed mortality rates of captured turtles with other

nations engaged in similar fishing practices to reduce fishery impacts to sea turtle populations worldwide .

9. NMFS should collaborate with the Forum Fisheries Agency to collect data on capture, injury and mortality of sea turtles and life history information aboard U.S. tuna purse seine vessels fishing in the western Pacific under the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America (South Pacific Tuna Treaty Act). Although there currently is an observer program for the U.S. tuna purse seine vessels fishing in the western Pacific through the Forum Fisheries Agency under the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America, the data collected is considered to be highly confidential by the 16 Pacific Island member countries and the release of data must be authorized by these countries before any release can occur. Currently, NMFS receives bycatch data associated with this fishery on an annual basis through the South Pacific Commission. However, the information does not provide specifics about sea turtle interactions such as location or condition, nor are the observers collecting life history information on captured sea turtles. In addition, data collected by vessel monitoring systems (VMS) is not provided to NMFS in a form which can be used to describe how U.S. vessels may be operating in the fishing areas and interacting with sea turtles. Therefore, NMFS should request that the collection of sea turtle information becomes a high priority for Forum Fisheries Agency observers and that sea-going observers have enough time to collect essential sea turtle life history and disposition information on any captured sea turtles and that VMS data be provided to NMFS for use in estimating the effects of U.S. vessels on sea turtles. This bycatch and fleet operation information is needed in an effort to obtain more representative data on sea turtle interactions. NMFS shall request that the Forum Fisheries Agency provide sea turtle data collected by observers aboard U.S. tuna purse seine vessels fishing under the Treaty on Fisheries Between the Governments of Certain Pacific Island States and the Government of the United States of America on a quarterly and annual basis. The report should include, at a minimum, the incidental capture, injury, and mortality of sea turtles by species, type of set in which each interaction occurred, and life history information. Photographs should be taken whenever possible.

XII. REINITIATION NOTICE

This concludes formal consultation on the action outlined above. As provided in 50 CFR 402.16, reinitiation of formal consultation is required where discretionary Federal agency involvement or control over the action has been retained (or is authorized by law) and if: (1) the amount or extent of the incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not considered in this opinion; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat not considered in this opinion; or (4) a new species is listed or critical habitat designated that may be affected by the action. In instances where the amount or extent of incidental take is exceeded, the Sustainable Fisheries Division should immediately request initiation of formal consultation.